

## SAP Business Warehouse/Business Intelligence Reporting

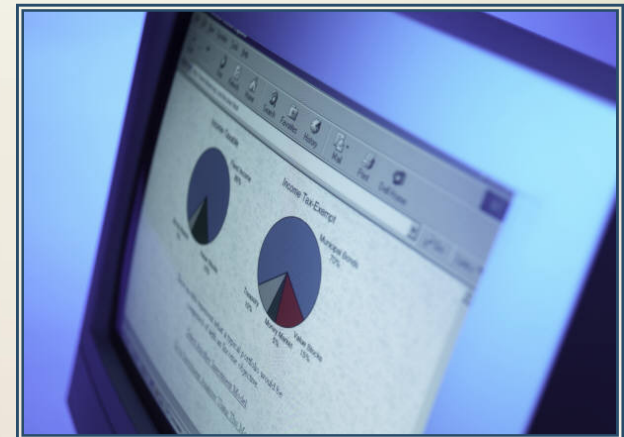
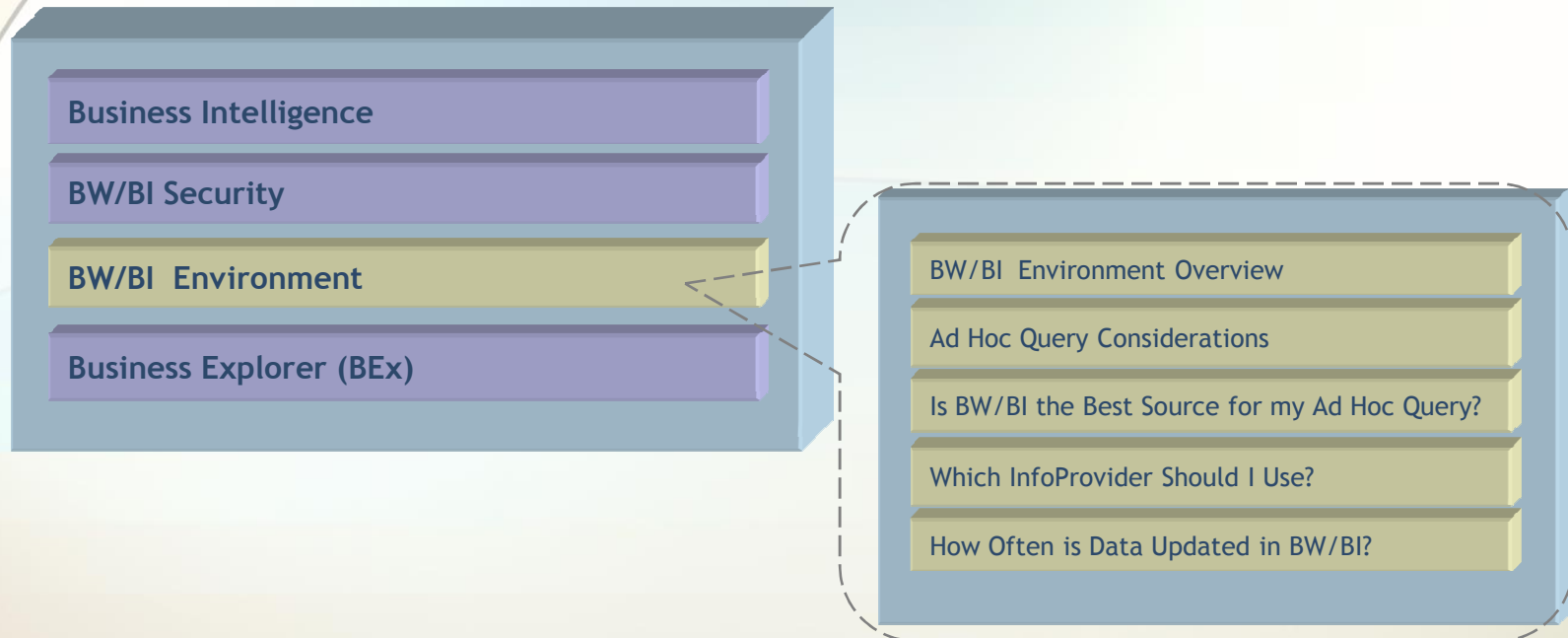
### **BW/BI Environment**

Washington State HRMS Business  
Warehouse/Business Intelligence (BW/BI)  
BW/BI Power User Workshop Materials

General Topics - BW/BI Power User

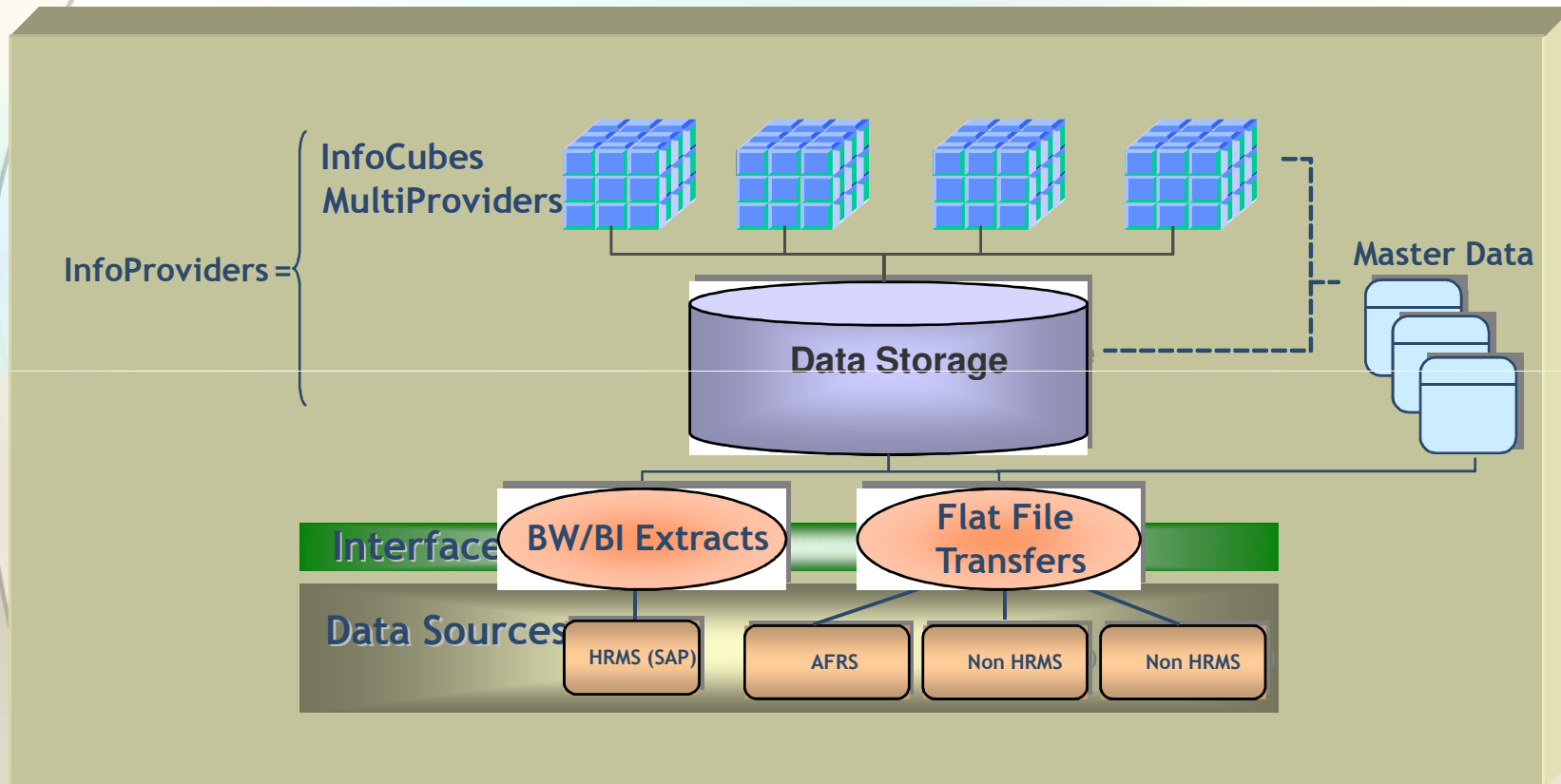
# BW/BI Environment

The following section provides an overview of the BW/BI Environment.



# BW/BI Environment Overview

The following diagram provides a high level view of the environment of the Business Intelligence and how data is retrieved and stored:

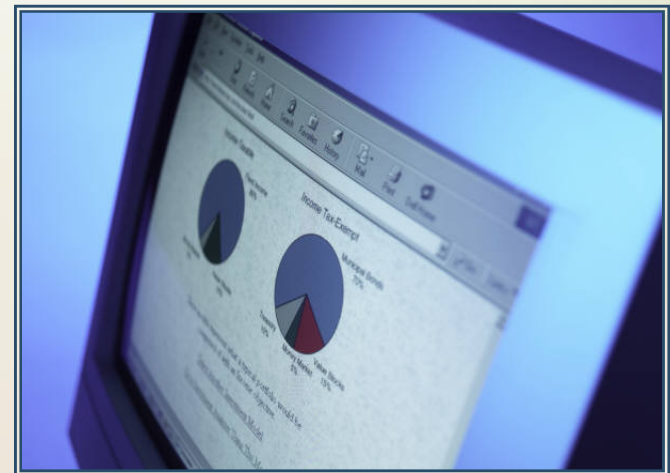


# Ad Hoc Query Considerations

Before creating an ad hoc query, BW/BI Power Users need to understand the business requirements for the ad hoc query.

The following sections include considerations BW/BI Power Users need to address prior to creating an ad hoc query in the BW/BI:

- Is BW/BI the Best Source for my Ad Hoc Query?
- Which InfoProvider Should I Use?
- How often is Data Updated in the BW/BI?



# Is BW/BI the Best Source for my Ad Hoc Query?

To determine if BW/BI is the best source for an ad hoc query, BW/BI Power Users need to consider:

- Does the ad hoc query require real-time data?
- Does the BW/BI contain data required for the ad hoc query? (For example, if Pay Period is required for the ad hoc query, BW/BI will not be the best source since Pay Period is not included in BW/BI ).
- Is there an existing report in HRMS?
- Is there an existing report in HRMS BW/BI?



# Is BW/BI the Best Source for my Ad Hoc Query, Cont...

HRMS contains two basic report types:

1. **HRMS Reports:** Includes SAP Delivered reports and Custom reports for the State of Washington. Contains real-time data.
2. **HRMS Business Intelligence Reports:** Includes Custom reports for the State of Washington. Does not contain real-time data.

## HRMS Reports

- HRMS reports are accessed in HRMS
- Includes SAP Delivered reports and Customized Reports for the State of Washington
- Provides ability to report from “real-time” data since the data is maintained in the HRMS application

Personnel Area	Full Name	Educational establishment	Certificate
Dept of Personnel		Col Grad 4 Yr Degree	Not Applicable
Dept of Personnel		Col Grad 4 Yr Degree	Not Applicable
Dept of Personnel		High School or GED	Not Applicable
Dept of Personnel		Some College-20hrs+	Not Applicable
Dept of Personnel		Other Master Degree	Not Applicable
Dept of Personnel		Col Grad 4 Yr Degree	Not Applicable
Dept of Personnel		Col Grad 4 Yr Degree	Not Applicable
Dept of Personnel		Voc. or Bus. School	Not Applicable
Dept of Personnel		Col Grad 4 Yr Degree	Not Applicable
Dept of Personnel		MAMSMBSW Degree	Not Applicable
Dept of Personnel		Voc. or Bus. School	Not Applicable
Dept of Personnel		AA Degree	Not Applicable
Dept of Personnel		AA Degree	Not Applicable

## HRMS BW/BI Reports

- Accessible through the HRMS Portal
- Includes Customized Reports for the State of Washington
- Provides the ability to report from specific data that has been extracted and loaded from HRMS and other sources such as AFRS
- This is NOT “real-time” data since the data is not maintained within the HRMS BW/BI application

Employee ID	Employee Name	Action Date	Action Type
20000283	20000283	06/01/2006	UW New Hire
90001159	% Decl. Balance Production Support 90001	01/01/2005	UW Initial Conversion
90000612	000A Marine Division	03/01/2006	UX Current Conversion Active
90000612	000A Marine Division	01/01/2005	UW Initial Conversion
90000612	000C Marine Division	07/01/2005	UX Current Conversion Active
90000612	000C Marine Division	01/01/2005	UW Initial Conversion
90000612	000C Marine Division	07/01/2005	UX Current Conversion Active
90000620	000P Marine Division	01/01/2005	UW Initial Conversion
90000620	000P Marine Division	07/01/2005	UX Current Conversion Active

Continued...

# Is BW/BI the Best Source for my Ad Hoc Query, Cont...

If an ad hoc query requires real-time data, HRMS may be the appropriate source for retrieving data. HRMS provides many options for data retrieval. For example, the Flexible Employee Data Report (Transaction: ZHR\_RPTPAN02) in HRMS allows the user to select fields to include on the report.

In the example below, the Flexible Employee Data Report was used to retrieve data for Personnel Area, Full Name, Educational Establishment and Certificate fields.

Program Edit Goto System Help

**Flexible Employee Data Report**

Further selections Search helps Sort order Org. structure

Key date  
☒ Today  
☐ Other keydate  
 Key Date

Selection  
 Personnel Number

Data Limiter  
 Number of Employees 100

Additional data  
 Field selection

**HR field selection**

Selectable fields  
 Other Agency Commission Date  
 Pay Scale Area  
 Pay Scale Area Code  
 Pay Scale Group  
 Pay Scale Level  
 Pay Scale Reason  
 Pay Scale Reason Code  
 Payroll Area  
 Payroll Area Code  
 Personal Holiday Eligible  
 Personnel Area Code  
 Personnel Number  
 Personnel Subarea  
 Personnel Subarea Code

Selected fields  
 Personnel Area  
 Full Name  
 Educational establishment  
 Certificate

Selection: 4 / 30

**Flexible Employee Data Report**  
Date Range: 01/23/2006 - 01/23/2006

Personnel Area	Full Name	Educational establishment	Certificate
Dept of Personnel	AH	Col Grad 4 Yr Degree	Not Applicable
Dept of Personnel		Col Grad 4 Yr Degree	Not Applicable
Dept of Personnel		High School or GED	Not Applicable
Dept of Personnel		Some College-2Qtrs +	Not Applicable
Dept of Personnel		Other Master Degree	Not Applicable
Dept of Personnel		Col Grad 4 Yr Degree	Not Applicable
Dept of Personnel		Col Grad 4 Yr Degree	Not Applicable
Dept of Personnel		Voc. or Bus. School	Not Applicable
Dept of Personnel		Col Grad 4 Yr Degree	Not Applicable
Dept of Personnel		MAMS/MSW Degree	Not Applicable
Dept of Personnel		Voc. or Bus. School	Not Applicable
Dept of Personnel		AA Degree	Not Applicable

Flexible Employee Data Report Results

Select fields for the Flexible Employee Data Report

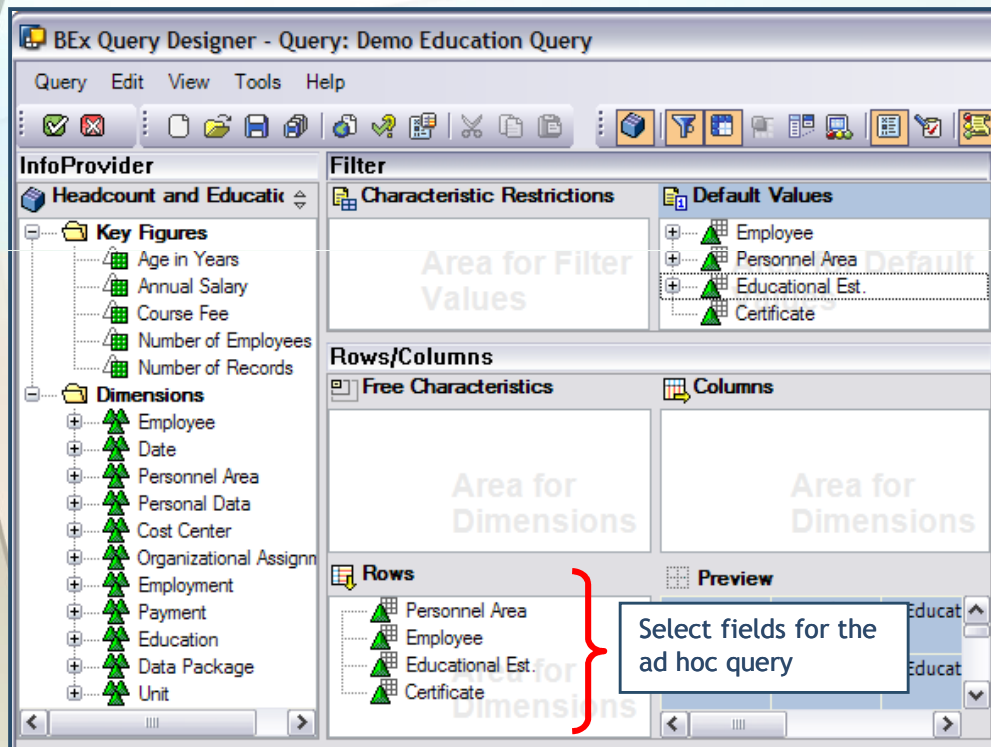
BW/BI Power User Workshop materials are specific to HRMS BW/BI reports and ad hoc queries only. HRMS reports are covered in separate HRMS Training Materials.



# Is BW/BI the Best Source for my Ad Hoc Query, Cont...

If an ad hoc query does not require real-time data, HRMS BW/BI may be the appropriate source for retrieving data.

In the example below, the Headcount and Education MultiCube in HRMS BW/BI was used to retrieve data for Personnel Area, Employee Name, Educational Establishment and Certificate fields.



Demo Education Query

Display As: Table | Information | Send | Print Version | Export to Excel | Comments

Columns	Personnel Area	Employee	Educational Est.	Certificate
Rows	Admin for the Courts		Unknown	Not Applicable
Personnel Area			Col Grad 4 Yr Degree	Not Applicable
Employee			Unknown	Not Applicable
Educational Est.			Unknown	Not Applicable
Certificate			Unknown	Not Applicable
Free characteristics			PHD, LLD, MD, JD	Not Applicable
			Some College-2Qtrs+	Not Applicable
			Some College-2Qtrs+	Not Applicable
			Some College-2Qtrs+	Not Applicable
			Some College-2Qtrs+	Not Applicable
			Col Grad 4 Yr Degree	Not Applicable
			Some Grad Work	Not Applicable
			MAJMSISW Degree	Not Applicable
			MAJMSISW Degree	Not Applicable
			MAJMSISW Degree	Not Applicable
			PHD, LLD, MD, JD	Not Applicable
			PHD, LLD, MD, JD	Not Applicable
			MAJMSISW Degree	Not Applicable

HRMS BW/BI ad hoc query results



# Which InfoProvider Should I Use?

Once BW/BI Power Users have determined the BW/BI is the best source for the ad hoc query, they need to determine which InfoProvider to use.

For example:

- The Quota Data InfoCube contains quota and accrual balances
- The Headcount and Education MultiCube contains education and training information

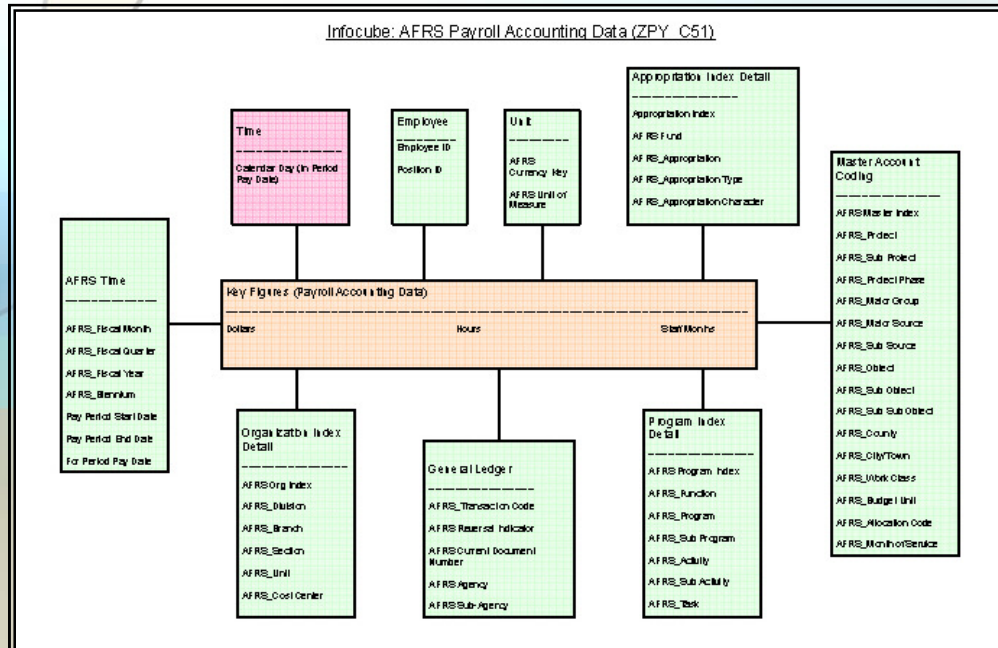
The table below lists BW/BI InfoProviders with examples of how the InfoProvider might be used:

InfoProvider	InfoProvider Type	Example of Use
AFRS Payroll Accounting Data (ZPY_C51)	InfoCube	➤ Employee and Position level Payroll and Financial information provided by AFRS
Employee Specific Payroll Data (ZPY_M01)	InfoCube	➤ Wage types by Personnel Area and/or Employee ➤ Employee count by Wage Type
Employee Specific Payroll Data w/PA (ZPY_M02)	MultiCube	➤ Combines data from Employee Specific Payroll Data (ZPY_M01) and Headcount and Personnel Actions (ZPA_C01)
Headcount and Education (ZPA_M50)	MultiCube	➤ Number of records by Educational Establishment, Certificate and Education/Training ➤ Employee list by Educational Establishment, Certificate and Education/Training
Headcount and Personnel Actions (ZPA_C01)	InfoCube	➤ Summary level employee counts by demographic areas such as Gender, County Code, Employee Group, etc. ➤ Detail level employee counts by employee specific information such as Employee Name, Personnel ID, etc. ➤ Employee count by personnel Action Type or Action Reason ➤ Employee list by personnel Action Type or Action Reason
Quota Data (ZPT_M02)	InfoCube	➤ Quota accrual and balances by Personnel Area and/or Employee
Staffing Assignments (ZPAOS_C01)	InfoCube	➤ Position count by Organizational Unit and/or Job Class ➤ Position list by Organizational Unit and/or Job Class
Time and Labor (ZPT_M01)	InfoCube	➤ Time balances and accruals by Personnel Area and/or Employee
Grievance Data (ZGR_M01)	MultiCube	➤ Grievance data by Bargaining Unit.
E-Recruiting Data (ZPAER_M01)	MultiCube	➤ E-Recruiting data by Requisition, Hiring Mgr and/or Questionnaires.

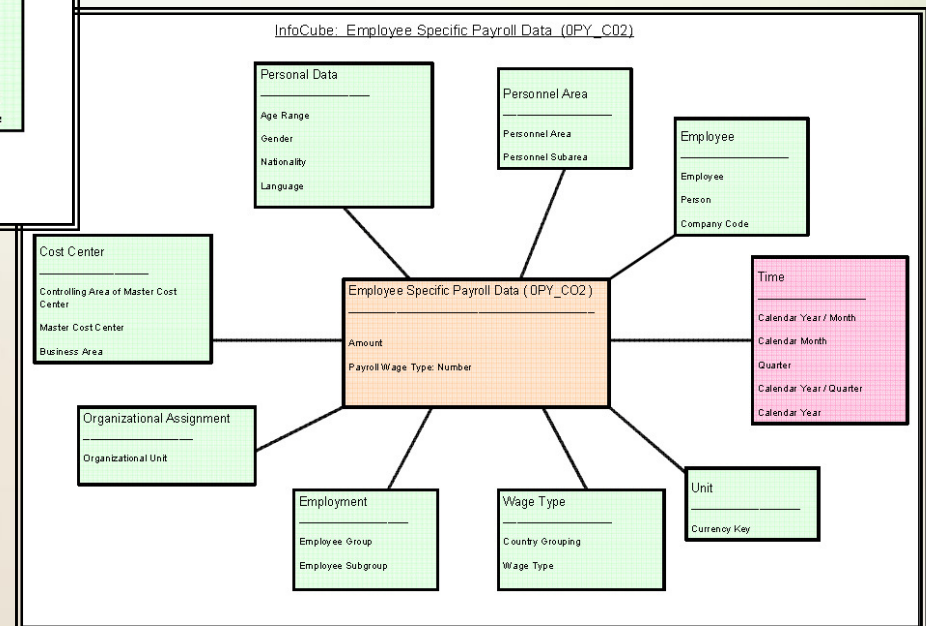
# Which InfoProvider Should I Use, Cont...

The following designs display the reporting elements included in the BW/BI InfoProviders:

## AFRS Payroll Accounting Data (ZPY\_C51) - Financials InfoCube



## Employee Specific Payroll Data (ZPY\_M01) InfoCube

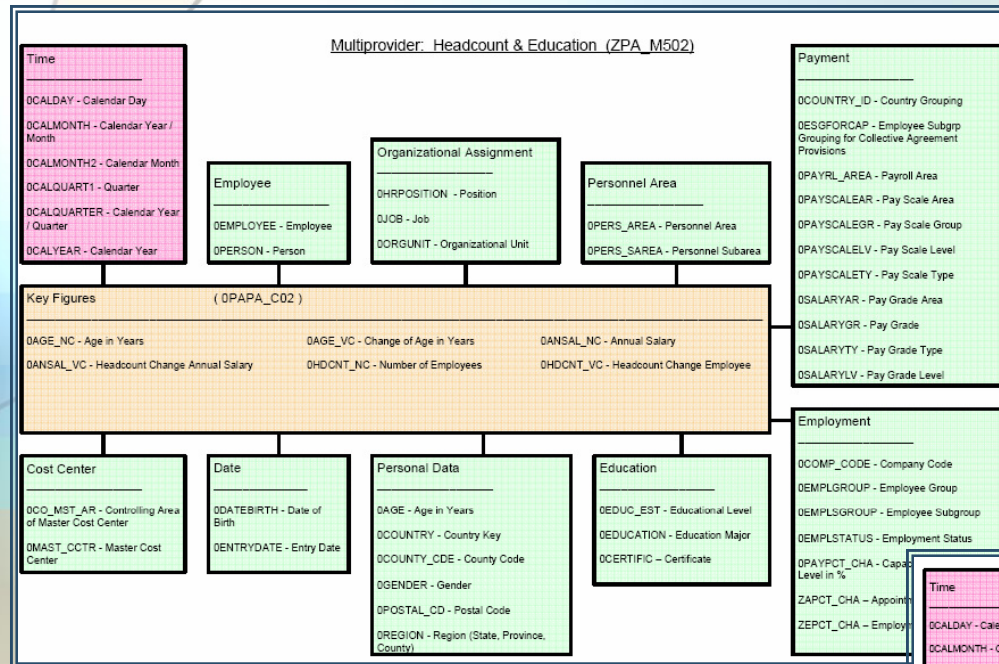


InfoProvider Designs can be viewed from the HRMS Customer Support website:

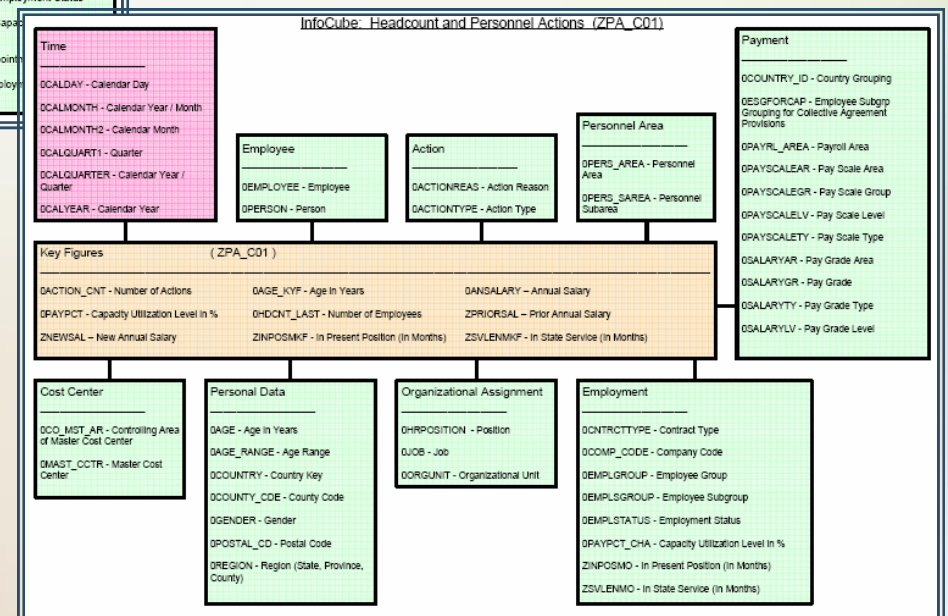
<http://www.dop.wa.gov/payroll/HRMS/HRMSSupport/Pages/BusinessIntelligence.aspx>

# Which InfoProvider Should I Use, Cont...

## Headcount & Education (ZPA\_M50) MultiCube



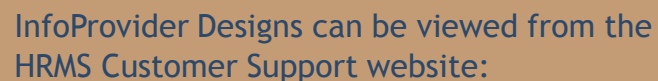
## Headcount & Personnel Actions (ZPA\_C01) InfoCube



InfoProvider Designs can be viewed from the HRMS Customer Support website:

<http://www.dop.wa.gov/payroll/HRMS/HRMSSupport/Pages/BusinessIntelligence.aspx>

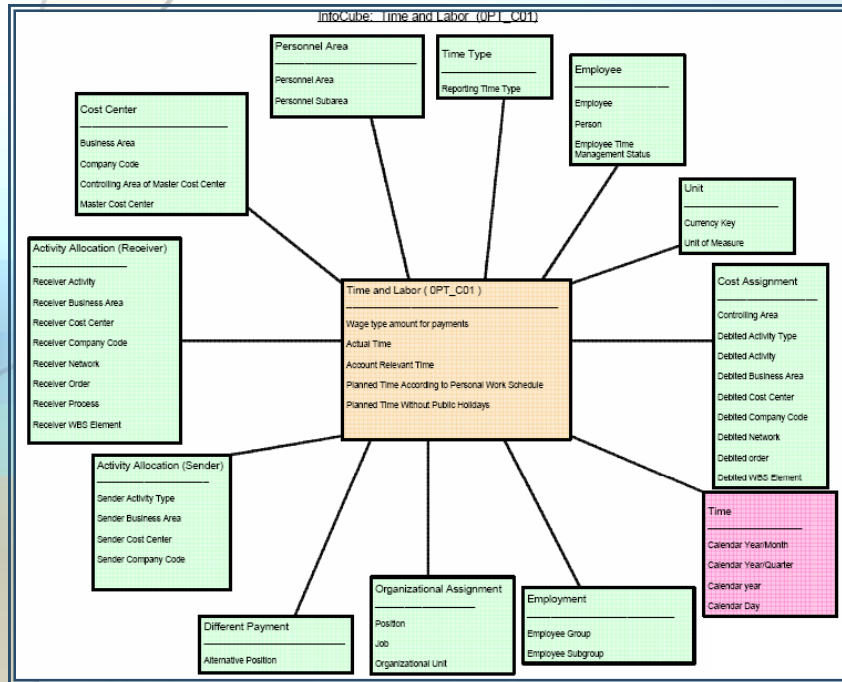
## InfoCube: Quota Data (ZPT C51)

[illegible]

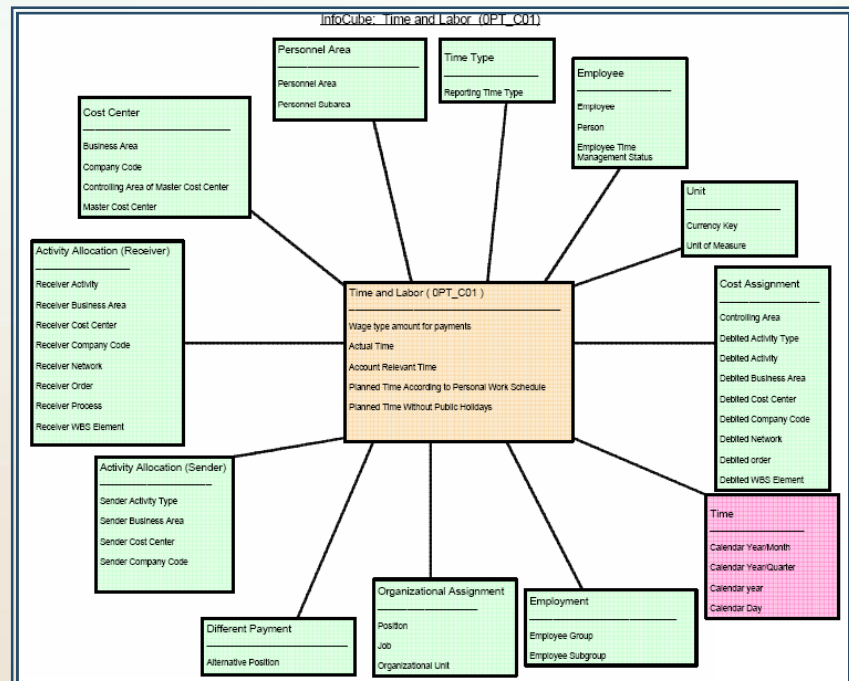


# Which InfoProvider Should I Use, Cont...

## Time and Labor (ZPT\_C01) InfoCube



## Employee Specific Payroll with PA (ZPY\_M02) InfoCube



InfoProvider Designs can be viewed from the HRMS Customer Support website:

<http://www.dop.wa.gov/payroll/HRMS/HRMSSupport/Pages/BusinessIntelligence.aspx>

# How Often is Data Updated in BW/BI?

Once BW/BI Power Users have determined which InfoProvider to use for an ad hoc query, they need to also consider how often the data is updated in the BW/BI since it is not real-time data and update frequencies vary.

The table below provides an overview of the update frequency of each InfoProvider in BW/BI .

InfoProvider	Update Frequency	Data Load Schedule
AFRS Payroll Accounting Data (ZPY_C51)	Daily (note: AFRS Payroll Accounting Transactional Data will be updated when an adjustment has been made and a new AFRS file is available. If no adjustments have occurred, AFRS Payroll Accounting Transactional Data will be updated after the next payroll exit)	Daily
Headcount and Personnel Actions (ZPA_C01)	Daily	Daily
Employee Specific Payroll Data (ZPY_M01)	Semi-Monthly	After Payroll Exit
Employee Specific Payroll Data w/PA (ZPY_M02)	Semi-Monthly	After Payroll Exit
Quota Data (ZPT_M02)	Monthly	1 <sup>st</sup> Friday/mo*
Time and Labor (ZPT_M01)	Semi-Monthly	After Payroll Exit
Headcount and Education (ZPA_M50)	Monthly	1 <sup>st</sup> Friday/mo*
Staffing Assignments (ZPAOS_C01)	Weekly	Friday
Grievance (ZGR_M01)	Weekly	Friday

\*In the months that HRMS Payroll processing is scheduled to occur over the first Friday of the month, the BW/BI load will be rescheduled. Usually for the second Friday of the month.

# How Often is Data Updated in BW/BI, Cont...

The table below provides an overview of the update frequency for the most commonly used Master Data in BW/BI .

Master Data	Update Frequency	Data Load Schedule
Employee	Daily	Daily
Person	Daily	Daily
Company Code	Weekly	Friday
Contract Type	Weekly	Friday
Job	Weekly	Friday
Org Unit	Weekly	Friday
Pay Grade Level	Weekly	Friday
Pay Grade Level To	Weekly	Friday
Pay Scale	Weekly	Friday
Pay Scale Level	Weekly	Friday
Pay Scale Level To	Weekly	Friday
Position	Weekly	Friday



# How Often is Data Updated in BW/BI, Cont...

While an InfoProvider may be updated Weekly, Master Data that is being referenced in the InfoProvider may be updated daily.

The following illustration provides an example of different update frequencies for InfoProviders and Master Data using the Staffing Assignments InfoCube as an example.

